REQUEST FOR QUOTATION



CITY OF DANVILLE 427 Patton Street P.O. Box 3300 Danville, VA 24543 (434) 799-6528 FAX: (434) 799-5102

THIS IS NOT AN ORDER

RFQ NUMBER: Q003045 05/22/15 RFQ DATE:

E-mail: purchasing@danvilleva.gov Internet: www.danville-va.gov TAX ID # 54-600-1243

N D 0

BID

VENDOR # BID

WATER & GAS DIVISION UTILITY SERVICE BUILDING 1040 MONUMENT ST DANVILLE, VA 24541

Deliver To: ALLEN WILES

Instructions:

It is understood that our terms and conditions listed on back will apply to any order that may result from this solicitation.

Note any exceptions for our consideration.

F.O.B. Destination: It is the basic policy of the City to receive goods F.O.B. (free on board) Destination, which means that freight charges are paid by the seller who owns and assumes all risk for the goods until they are accepted at the designated delivery point. The cost of shipping the goods may be included in the quoted price or by the seller as a separate line item.

| Quote Required By | Send Quote To | | |
|-------------------|---------------|--|--|
| 06/01/15 | GARY VIA | | |

R027529

| TEM | QUANTITY | UNIT | DESCRIPTION | UNIT PRICE | EXTENSION |
|-----|----------|------|---|------------|-----------|
| 001 | 1 | LS | Wrap 129 ft of Gas Pipe on Fall Creek Bridge US Route 58 East per attached document | | |
| 002 | 1 | LS | Paint 43 ft of Gas Pipeline on London Bridge bridge | | |
| | | | Per attached specifications and documents as prepared by RK&K dated May 2015 | | |
| Wat | er and | Gas | it contact Allen Wiles, Division, Division | | |
| | | | 4.799.5268 @danvilleva.gov | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | TOTAL | 70.70 |

| Payment Terms | Freight Terms | Delivery Promised | Telephone | Fax |
|-------------------|----------------------|---------------------|-----------|-----|
| Quote Valid Until | Vendor Quotation No. | Signature and Title | | |
| | | | | |

PURCHASE ORDER TERMS AND CONDITIONS

- Show the purchase order number indicated on the upper right-hand corner on all cartons, correspondence and invoices.
- All invoices shall be sent to: City of Danville
 Purchasing Dept.
 P.O. Box 3300
 Danville, VA 24543
- 3. No changes, deletions, or additions may be made to this order without approval of the Director of Purchasing.
- 4. In case of default by the vendor, or he fails to deliver the supplies or services ordered by the time specified, the City, after due notice (verbal or written), may procure the requirement from other sources and hold him responsible for any excess cost incurred thereby.
- 5. The vendor shall assume the defense of and indemnify and hold harmless the City, its officers and agents, and employees from and against any and all claims, demands, actions, suits, and proceedings by others arising out of the negligent acts, errors or omissions of the vendor in his performance of this order.
- 6. The City is exempt from payment of State Sales and Use Tax on all tangible personal property purchased or leased for its use or consumption. Certificate of Exemption will be furnished upon request.
- 7. All prices are to be quoted FOB Destination, Freight Allowed.
- 8. This Order and the performance hereof shall be governed by and enforced under the laws of the Commonwealth of Virginia, and if legal action by either party is necessary for or with respect to the enforcement of any or all of the terms and conditions hereof, then exclusive venue therefore shall lie in the City of Danville, Virginia.
- 9. All goods, material and work covered by this purchase order shall conform to the specifications, drawing, samples, or other description furnished by the City and shall be merchantable, of good material and workmanship, and free from defect. Vendor warrants good title and freedom for encumbrances, and warrants against infringement. Acceptance hereunder may not exclude any warranty.
- 10. Shipment of goods shall constitute acceptance of this purchase order with its terms and conditions.
- 11. The City of Danville does not discriminate against faith-based organizations in accordance with the Code of Virginia §§ 2.2-4343.1 or against a bidder or offeror because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment.
- 12. This purchase order may be accepted only by complete compliance with its terms and conditions.

Note: This document is included with request for quote for information purposes.

SPECIFICATIONS and DOCUMENTS

for

PAINTING AND COATING OF BRIDGE-ATTACHED NATURAL GAS PIPELINES

SOUTH BOSTON ROAD AT FALL CREEK &
LONDON BRIDGE DRIVE AT PUMPKIN CREEK

REQUEST FOR QUOTES

CITY OF DANVILLE
DEPARTMENT OF UTILITIES
WATER AND GAS DIVISION
DANVILLE, VIRGINIA

MAY 2015

Prepared By



RUMMEL • KLEPPER & KAHL, LLP
Consulting Engineers
Richmond, Virginia

TABLE OF CONTENTS

| REQUEST FOR QUOTE | ADV |
|--|-------|
| INSTRUCTIONS FOR QUOTING | INST |
| QUOTE | PP |
| PERFORMANCE SPECIFICATIONS | S |
| APPENDIX A – STATEMENT OF QUALIFICATIONS | APP-A |

END OF TABLE OF CONTENTS

REQUEST FOR QUOTE

CITY OF DANVILLE

"PAINTING AND COATING OF BRIDGE-ATTACHED NATURAL GAS PIPELINES -SOUTH BOSTON ROAD AT FALL CREEK & LONDON BRIDGE DRIVE AT PUMPKIN CREEK"

Project Owner: City of Danville, Virginia

Department of Utilities

Water and Gas Division

Project Description: The Work included under this Purchase Order shall include supplying all materials, labor, certifications, expertise, and equipment necessary to evaluate the condition of the existing coating; remove the coating determined to be of poor quality; contain, collect, store, transport, and dispose of the removed material and any vapor, chemical, water and/or abrasives used in coating removal, cleaning and preparing of the pipe and/or appurtenances and existing coating for application of a new paint system or coating system; the application of the new paint system or new coating; and the inspection and evaluation of the new paint system or new coating system. This project includes two project locations.

A general description of the pipeline segments is:

- Approximately forty-three (43) feet of exposed eight (8) inch cast iron pipe beneath a bridge crossing Pumpkin Creek on London Bridge Drive in the City limits of Danville, Virginia. There is no existing coating system on this pipeline segment. The pipeline segment will be coated with a paint system.
- Approximately one hundred twenty-nine (129) feet of exposed eight (8) inch ductile iron pipe beneath a bridge crossing Fall Creek on South Boston Road (Highway 58) in the City limits of Danville, Virginia. The existing coating system on this pipeline segment is a mastic coating. The pipeline segment will be coated with a tape wrap system.

All Work included within the scope of this project is assumed to be included under the requirements of coating for VDOT Type B Structures that have coatings that may generate hazardous wastes.

This Purchase Order shall require the Contractor to work on live gas mains.

Project Location: The project is located inside of the City Limits of Danville, Virginia, within the City's existing natural gas system.

Natural Gas Specific Requirements

For Quoting: Potential Contractors shall comply with all Federal requirements for working on natural gas distribution systems as described in the project documents. In addition to compliance with Federal requirements, all Contractor plans and programs shall meet or exceed the standards of the City of Danville's plans and programs. The requirements include:

- Drug and Alcohol Testing Program The Contractor shall have a written plan and a random testing program in accordance with the Code of Federal Regulations Title 49, Chapter 1, Part 199 "Drug and Alcohol Testing."
- 2) Operator Qualification The Contractor shall have a written plan and personnel shall have appropriate qualifications in force during the performance of any work for the City's Water and Gas Division in

accordance with the Code of Federal Regulations Title 49, Chapter I, Part 192, Subtitle N. "Qualification of Pipeline Personnel."

Quote Due Date and Time:

5:00 p.m. June 1, 2015

Local prevailing time (Eastern Standard time) at the City of Danville Purchasing Department, Room 304, Municipal Building, 427 Patton Street, Danville, Virginia

Direct Inquiries to: Quoting Procedures

Gary Via

City of Danville Purchasing Department

434-799-6528 434-799-5102 (fax)

or

Technical

Allen Wiles, Director of Water and Gas City of Danville Water and Gas Division

434-799-5268 ext. 2082 434-799-6583 (fax)

1.1 General

- A. Quotes: Quotes will be received by Mr. Gary Via, Director of Purchasing, at the City of Danville Purchasing Department, Room 304, Municipal Building, 427 Patton Street, Danville, Virginia 24541, until the due date and time stated above for the project described above and defined by the Project Documents.
- B. Copies of the Project Documents may be obtained from the City of Danville Purchasing Department upon request.
- C. Project Documents are available on the City's website (http://www.danville-va.gov/bids.aspx) or may be reviewed at the following location:

Purchasing Department Municipal Building, Room 304 427 Patton Street Danville, Virginia 24541

- D. Submission of Quotes: Quotes shall be submitted as described in the Instructions for Quoting.
- E. Quote Evaluation: Quotes will be evaluated as described in the Instruction for Quoting.
- F. Time of Completion:

The Contractor shall include a proposed time for completion of the project in the Quote.

G. The City reserves the right to reject any or all of the submitted Quotes.

INSTRUCTION TO QUOTE

General:

To be valid for consideration, Quotes must be completed and submitted in accordance with these Instruction to Quote.

Qualification for Quoting:

Statement of Qualifications

All Contractors must be qualified by the City of Danville's Purchasing Department and the Water and Gas Division. The "Statement of Qualifications" (SOQ) form is included in this Documents Package as Appendix A. The SOQ forms are used to document qualifications including financial data, previous experience, and evidence of authority to conduct business in the project jurisdiction.

Drug and Alcohol Plan

Each Contractor shall have a written anti-drug and anti-alcohol plan and a random testing program in accordance with the Code of Federal Regulations Title 49, Chapter 1, Part 199 "Drug and Alcohol Testing."

Operator Qualification Plan

Each Contractor shall have a written Operator Qualification plan and the Contractor's personnel that will be performing work for the City of Danville shall have appropriate qualifications in force during the performance of any work for the City's Water and Gas Division in accordance with the Code of Federal Regulations Title 49, Chapter I, Part 192, Subtitle N, "Qualification of Pipeline Personnel."

Examination of Documents and Site:

Before submitting quotes, each Contractor must examine the Documents thoroughly; familiarize Himself with Federal, State and Local laws, ordinances, rules, and regulations affecting the Work; and correlate His observations with requirements of the Documents.

Should a Contractor find discrepancies in, or omissions from, the Documents, or should He be in doubt as to their meaning, He should notify the Engineer immediately. The Engineer may send written instructions to each person receiving a set of Documents following such notice from a Contractor(s).

Whenever a certain brand, make, or manufacturer is noted in the Specifications, it is intended to denote the quality standard of the article desired or being provided by the City, <u>but unless otherwise noted</u> does not restrict Contractor or the City to the specific brand or manufacturer. It is intended to set forth and convey to the prospective Contractor the general style, type, character, and quality of the article desired or being provided.

Each Contractor is requested and expected to visit the project site to alert Himself to local and special conditions which may be encountered during prosecution of the project such as: labor and transportation, handling and storage of materials, the availability of materials, and site access. Failure to make such investigations shall not relieve the successful Contractor from performing and completing the Work in accordance with the Documents.

Interpretations:

No oral interpretations of the Documents will be made to any Contractor. To be given consideration, requests for interpretations must be received in time to allow preparation of written response at least three (3) business days prior to the date fixed for receipt of quotes. Interpretations will be issued in the form of a written Addendum (Addenda) to the Documents and mailed or faxed to all parties recorded by The City of Danville Purchasing Department as having received Documents, prior to scheduled receipt of Quotes. Only interpretations by formal written addenda will be binding.

All communications in regard to interpretations and any other matters related to this project shall be addressed to the Project Manager, Brian E. Hahn at the Richmond office of Rummel, Klepper and Kahl, 2100 E. Cary Street, Suite 309, Richmond, Virginia 23223 and copied to Allen Wiles, Director of Water and Gas, City of Danville Water and Gas Division, 1140 Monument Street, Danville, Virginia 24541.

Preparation of Documents:

Documents necessary for the submission of Quotes will be provided as indicated in the Request for Quotes.

All Quotes must be made upon the blank form provided in this Quote Request package. Unit Quote prices are to be submitted in figures. The prices are to include the furnishing of all materials, equipment, tools, and other facilities, and the performance of all labor work, except such as may be otherwise expressly provided for in the Documents.

The Quote consists of two separate work items. The Contractor shall submit lump sum price for each of the items in the Request for Quotes.

The Contractor shall also submit time requirements for completing the project. The time requirement shall be based on the working days required to complete the project.

The Contractor shall sign his Quote correctly and Quotes may be rejected if they show any omissions, alterations of form, additions not called for, conditional quotes, or any irregularities of any kind.

Each Quote package shall include the following:

- 1. Quote
- 2. Statement of Qualifications Form

Each Quote must be submitted in a sealed envelope, marked sufficiently to indicate its contents without being opened. The Contractor's Virginia License number should be noted in the lower right side of the envelope with the following notation "Virginia License No. ______". This envelope shall be addressed to or may be enclosed in a second envelope addressed to:

Gary Via, Director of Purchasing City of Danville Municipal Building 427 Patton Street Danville, Virginia 24541

Insurance.

The Insurance Certificate shall be drawn on forms acceptable to the City.

Equal Opportunity Employment:

The Code Of Virginia Section 11-51 will govern the terms of this Purchase Order.

Receipt of Quotes:

Quotes for the painting and coating of bridge-attached natural gas pipelines in the City's natural gas distribution system will be received by the Director of Purchasing in Room 304 of the City of Danville Municipal Building, until 5:00 p.m. (DST) on June 1, 2015. Any Quotes received after the time and date specified will not be considered. Conditional Quotes will be rejected.

Modification and Withdrawal of Quotes:

Quotes may be modified or withdrawn by an appropriate document duly executed and delivered to the place where the Quotes are to be submitted at any time prior to the deadline for submission of Quotes.

Assignment of Purchase Order:

The assignment of the Purchase Order will be to the lowest responsible and responsive Contractor, whose qualifications indicate the award will be in the best interest of the City of Danville Water and Gas Division and whose Quote meets the prescribed requirements.

The City reserves the right to reject any and all Quotes and waive any and all informalities and the right to disregard all nonconforming or conditional Quotes or counterproposals.

Submission of post-Quote information shall be in accordance with the Documents.

The City reserves the right to request a financial statement together with a statement of past related experience, personnel, and equipment available to perform the Contract in addition to the information provided for the SOQ. Failure or refusal to furnish such a statement or statements shall constitute a basis for disqualifying any Contractor.

The Contractor must agree to commence work on or before a date to be specified in a written Notice to Proceed issued by the Engineer and to fully complete the Work within the number of consecutive calendar days stated in the Notice to Proceed.

The Contractor shall obtain and pay for all necessary permits, taxes and licenses required in connection with the Work, and he must strictly comply with all laws, local ordinances, and regulations that may apply to the Work.

No charge of claims of the Contractor will be allowed for hindrance or delay from any cause in the progress of the Work.

CITY OF DANVILLE DEPARTMENT OF UTILITIES WATER AND GAS DIVISION

QUOTE

PAINTING AND COATING OF BRIDGE-ATTACHED NATURAL GAS PIPELINES SOUTH BOSTON ROAD AT FALL CREEK & LONDON BRIDGE DRIVE AT PUMPKIN CREEK

The undersigned hereby declares that He, or He and His associates are the only person or persons interested in the quote as principal or principals; that this quote is made without connection with any other person, company, or parties submitting a Quote; and that it is in all respects fair and in good faith without collusion or fraud.

The Contractor further declares that he has examined the site of the Work and informed himself fully in regard to all conditions pertaining to the place where the Work is to be done; that he has examined the Specifications for the Work and all associated documents relative thereto, and has read all special provisions furnished prior to the quote due date and time; that he has satisfied himself relative to the work to be performed, and materials and equipment to be furnished.

The Contractor proposes and agrees, if this quote is accepted, to furnish all materials as described in the documents, equipment, machinery, tools, apparatus, means of transportation, and labor necessary to perform in full and complete the requirements of the Specifications and related documents, to the full and entire satisfaction of the City of Danville, Virginia with definite understanding that no money will be allowed for extra work except as set forth in the attached Documents and the referenced <u>Standard Requirements & Instructions</u> for Bidding, for the lump sum prices set opposite the several items that follow.

Final payment shall be made for the measured quantities at the lump sum price listed below. All items necessary to complete the installations as described in the Documents shall be included in the lump sum price listed below and no other claim shall be made for payment. The prices provided in the Quote shall include all required sales tax, freight charges, and all other applicable taxes and fees.

All unit prices are to include the furnishing of materials by the Contractor as described in the Specifications.

QUOTE

The Contractor shall provide lump sum prices and time requirements for the painting or coating of bridge-attached natural gas pipelines as described in the Specifications.

| ITEN | DESCRIPTION OF WORK | UNIT OF MEASURE | SUB TOTAL Dollars & Cents | TIME REQUIRED Working Days |
|------|---|--------------------|---------------------------|----------------------------|
| 1.0 | Clean & Paint – London Bridge Dr. / Pumpkin Creek | LS | \$ | |
| 2.0 | Clean & Wrap – South Boston Road / Fall Cree | k LS | \$ | _ |
| Our | total price for the Work as described in these | Documents is | | |
| | | | _dollars (\$ |). |

In submitting the above quote, We represent and warrant that the prices for all items listed above represent Our quote for the Work herein described.

We understand that the execution of this Quote does not limit the Owner in the use of Its own personnel or crews of one or more other Contractors in the area covered by this Work.

The Contractor further agrees that:

- a) The City, in protecting its best interest, reserves the right to reject any or all quotes or waive any defects in favor of the City. Any changes, erasures, deletions in the lump sum prices above, modifications in the quote, or alternate proposals not specified in the quote request shall make the quote irregular and subject to rejection;
- b) That the Work under this Purchase Order will commence not later than ten (10) consecutive calendar days after the date of a written "Notice to Proceed" given by the City to the Contractor.

This Quote is subject to acceptance within a period of thirty (30) days from the date of this quote.

The undersigned agrees to substantially complete the Work included in the Quote within the times to be stated in the Agreement.

The undersigned Contractor acknowledges receipt of the following Addenda, which have been considered in preparation of this Quote:

| No Dated | d |
|---|---|
| No Dated | d |
| No Dated | d |
| CONTRACTOR: | SIGNATURE: |
| ADDRESS: | SIGNATURE: |
| | (printed) |
| | TITLE: |
| DATE: | PHONE: |
| FEDERAL TAX ID #: | FAX #: |
| CITY OF DANVILLE BUSINESS LICENSE | #: |
| STATE CORPORATION COMMISSION ID | #: |
| Registered as a contractor under Chapter 1 | 175E, Section 4539 (117), Code of Virginia as amended by Chapte |
| 404, Act of Assembly, 1944, Certificate No. | , 20 |

PERFORMANCE SPECIFICATIONS

FOR

PAINTING AND COATING OF BRIDGE-ATTACHED NATURAL GAS PIPELINES SOUTH BOSTON ROAD AT FALL CREEK

ጲ

LONDON BRIDGE DRIVE AT PUMPKIN CREEK

CITY OF DANVILLE DEPARTMENT OF UTILITIES WATER & GAS DIVISION

TABLE OF CONTENTS

| 1 SECTION 1 - GENERAL | 1 |
|---|---|
| 1.1 Scope of Work | 1 |
| 1.2 STANDARDS COMPLIANCE | 2 |
| 1.3 QUALITY OF WORKMANSHIP | 2 |
| 1.4 REGULATORY COMPLIANCE | 2 |
| 1.4.1 Drug-Free Work Place | |
| 1.4.1.1 Drug Testing | |
| 1.4.2 Operator Qualification | |
| 1.5 CONTRACTOR QUALIFICATIONS | |
| 1.5.1 Pre-requisites for Submitting Quotes | |
| 1.6 Insurance | 4 |
| 1.7 Interpretation of Specification Intent | |
| 1.8 Work Hours | |
| 1.9 TIME FOR COMPLETION | 4 |
| 1.10 ENGINEER AND PROJECT MANAGER | |
| 1.11 INSPECTION | |
| 1.11.1 Final Inspection | |
| 1.12 SCHEDULING OF WORK | 6 |
| 1.13 SPECIFICATION CONTRADICTIONS | |
| 1.14 SUPERINTENDENCE | |
| 1.15 CONTRACTOR CREW REQUIREMENTS | |
| 1.16 CERTIFICATIONS | |
| 1.17 PERMITS AND APPROVALS | |
| 1.18 MEASUREMENT AND PAYMENT | |
| 1.18.1 Implied Work | |
| 1.19 PAYMENT TO CONTRACTOR | |
| 1.20 SUSPENSION OF WORK | 8 |
| 2 SECTION 2 – ENVIRONMENTAL AND SAFETY STIPULATIONS | 1 |
| 2.1 References | 1 |
| 2.2 SUBMITTALS | |
| 2.2.1 Safety Plan | |
| 2.2.2 Environmental Plan | |
| 2.2.3 Permits, Authorizations and Approvals | |
| 2.3 SAFETY | 2 |
| 2.4 WATER POLLUTION | |
| 2.5 AIR POLLUTION | |
| 2.6 NOISE | |
| 3 SECTION 3 - MATERIALS | |
| | |
| 3.1 References | 1 |

| 3.2 | SUBMITTALS | 1 |
|-------|---|------|
| 3.2.1 | | |
| 3.2.2 | 1 / | |
| 3.2.3 | = | |
| 3.3 | PAINTING SYSTEM | 1 |
| 3.3.1 | | rime |
| Coat | t Containing Zinc Oxide | 2 |
| 3.3.2 | | |
| 3.3.3 | B Pigment | 2 |
| 3.4 | WRAP COATING SYSTEM | 2 |
| 3.5 | MINERAL AND SLAG ABRASIVES | 3 |
| 3.6 | WATER USED FOR CLEANING | 3 |
| 3.7 | SOLVENTS USED FOR CLEANING | 3 |
| 3.8 | TOOLS USED FOR MECHANICAL AND HAND CLEANING AND PREPARING PIPE FOR PAINTING | 3 |
| 3.9 | CONTAINMENT AND REMOVAL MATERIAL AND EQUIPMENT | 3 |
| 3.9.1 | | |
| | | |
| 4 SI | ECTION 4 - CONSTRUCTION REQUIREMENTS | 1 |
| 4.1 | References | 1 |
| 4.2 | PRE-CONSTRUCTION SUBMITTALS | |
| 4.2.1 | | |
| | 2.1.1 QP-1 | |
| | 2.1.2 QP-2 | |
| | 2.1.3 DPOR | |
| | 2.1.4 Professional Engineer | |
| 4.2.2 | | |
| 4.2.3 | | |
| 4.2.4 | | |
| 4.2.5 | | |
| 4.2.6 | | |
| 4.2.7 | | |
| 4.2.8 | | |
| 4.2.9 | | |
| 4.2.1 | | 5 |
| 4.2.1 | 11 Equipment List | 5 |
| 4.3 | SUBMITTALS DURING CONSTRUCTION | |
| 4.4 | SUBMITTALS FOLLOWING CONSTRUCTION | |
| 4.5 | MOBILIZATION | |
| 4.6 | EQUIPMENT, TOOLS, LABOR AND MATERIALS | |
| 4.6.1 | | |
| 4.6.2 | | |
| 4.0.2 | INSPECTION BY THE ENGINEER | |
| | RIGHT-OF-WAY AND EASEMENTS | |
| 4.8 | | |
| 4.9 | MAINTENANCE OF TRAFFIC | |
| 4.10 | MAINTENANCE OF INGRESS AND EGRESS | |
| 4.11 | TEST SECTION(S) OF PIPE | |
| 4.12 | INSPECTION AND EVALUATION OF EXISTING PIPE AND COATING | |
| 4.13 | CLEANING AND SURFACE PREPARATION | |
| 4.13 | | |
| 4.13 | | |
| | 13.2.1 Blast Cleaning | |
| | 13.2.2 Wet-Abrasive Blast Cleaning | |
| | 13.2.3 Surface Preparation by Power Tools and/or Hand Tools | |
| 4.13. | | |
| | sportation, and Disposalsportation Byproduct Containment, Collection, Storage, Remo | |
| 4.14 | | |
| | APPLICATION OF PRIME, INTERMEDIATE AND FINISH PAINT COATS (PAINT SYSTEM) | |
| 4.14 | · · · · · · · · · · · · · · · · · · · | |
| 4.14. | | |
| 4.15 | FIELD INSPECTION - QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) | |
| 4.15 | .1 Inspection Requirements | 12 |

| 4.15.2 | Inspection Equipment | 12 |
|--------|----------------------------|--------|
| 4.15.3 | Daily Inspection Reports . | 13 |
| 4.15.4 | Inspection Logbook | 13 |
| 4.16 | EROSION & SEDIMENT CONTROL | 13 |
| 4.17 | MATERIALS HANDLING | 13 |
| 4.18 | CLEANUP | 13 |
| 4.18.1 | Cleanup during Work | 13 |
| | Final Cleanup | |

1 SECTION 1 - GENERAL

1.1 Scope of Work

The Work shall consist of evaluating the condition of paint and mastic coating on existing natural gas utility piping attached to bridge structures within the City of Danville, Virginia. The evaluations shall consist of determining the acceptability of the existing bond of the coating to the pipe surfaces and the overall quality of the coating for recoating. Coating determined to have an inadequate bond to the metal or to be of poor quality as evidenced by peeling, blistering, cracking, severe hazing or oxidizing, wrinkling or other observable deterioration shall be removed from the existing pipes by the methods described within these specifications.

A general description of the pipeline segments is:

- Approximately forty-three (43) feet of exposed eight (8) inch cast iron pipe beneath a bridge crossing Pumpkin Creek on London Bridge Drive in the City limits of Danville, Virginia. There is no existing coating system on this pipeline segment. The pipeline segment will be coated with a paint system.
- Approximately one hundred twenty-nine (129) feet of exposed eight (8) inch ductile iron pipe beneath a bridge crossing Fall Creek on South Boston Road (Highway 58) in the City limits of Danville, Virginia. The existing coating system on this pipeline segment is a mastic coating. The pipeline segment will be coated with a tape wrap system.

Where coating is removed it shall expose the bare pipe metal. The exposed metal surfaces shall be cleaned and prepared for the application of the new paint system or encapsulation as described in these specifications. Where the existing coating is not removed, the existing coating surface shall be cleaned, prepared and evaluated for compatibility with the new paint or tape wrap system as described in these specifications.

Following cleaning, preparation and evaluation of compatibility of the surfaces of the pipes to be recoated, the new painting and tape wrap system shall be applied to the entire pipe comprising the bridge-attached crossing as described in these specifications.

All Work included within the scope of this project is assumed to be included under the requirements of coating for VDOT Type B Structures that have coatings that may generate hazardous wastes.

The Work included under this Purchase Order shall include supplying all materials, labor, certifications, expertise, and equipment necessary to evaluate the condition of the existing paint; remove the paint determined to be of poor quality; contain, collect, store, transport, and dispose of the removed material and any vapor, chemical, water and/or abrasives used in paint or mastic coating removal, cleaning and preparing of the pipe and existing paint for application of the new paint system; the application of the new paint system; and the inspection and evaluation of the new paint system.

This Purchase Order shall require the Contractor to work on live natural gas mains and facilities.

The Contractor shall also submit time requirements for completing each project area. The time requirement shall be based on the working days required to complete each project location.

The City reserves the right to add to or delete from the Work once the Contractor has mobilized. This Work must be performed in the order directed by the Engineer. The City also reserves the right to extend the term of the Purchase Order to allow for completion of any additional Work added to this Contract.

1.2 Standards Compliance

The Contractor shall comply with all provisions of the City of Danville's "Standard Requirements & Instructions for Bidding," Version 2.0, dated April 2, 2015 and the City of Danville Water and Gas Division's "Natural Gas Operations and Maintenance Plan", dated March 20, 2015. Copies of the "Standard Requirements & Instruction for Bidding" may be obtained from the City of Danville Purchasing Department, located at 427 Patton Street. The "Natural Gas Operations and Maintenance Plan" may be viewed at the Utilities Services Building - Engineering Department, located at 1040 Monument Street.

1.3 Quality of Workmanship

It is the intent of the City that all Work on the natural gas distribution system be performed in a manner which meets the highest standards. Therefore; all personnel shall be trained and qualified to perform the required tasks.

1.4 Regulatory Compliance

1.4.1 <u>Drug-Free Work Place</u>

During the performance of this contract, the Contractor agrees to:

- (1) Provide a drug-free workplace for the Contractor's employees.
- (2) Post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violation of such prohibition.
- (3) State in all solicitations or advertisements for employees place by or on behalf of the Contractor that the Contractor maintains a drug-free workplace.
- (4) Include the provisions of the foregoing clauses in every subcontract, so that the provisions will be binding upon each subcontractor or vendor.

"Drug-free workplace" means a site for the performance of Work done in connection with a project in accordance with this chapter. The employees of the Contractor are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the Work.

1.4.1.1 Drug Testing

Any and all employees of the Contractor who will be involved with the performance of construction and maintenance operations under this Purchase Order shall be required to participate in an anti-drug/drug testing program. This program shall be administered in accordance with Title 49 of the Code of Federal Regulations, Chapter I, Part 199 (49 CFR 199), "Drug and Alcohol Testing," and Subtitle A, Part 40, "Procedures for Transportation Workplace Drug Testing Programs." The program must have been in force for no less than 12 months and the Contractor must show proof of enforcement to the Owner.

The Contractor shall furnish the City with documentation of participation in a qualified drug-testing program. Prior to the performance of any fusion and/or tie-in

operations, a negative (no evidence of drug use) test must be documented for all employees who will be involved with these operations.

Between the dates of January 15 and February 1 of each calendar year of this contract, the Contractor shall provide a completed copy of PHMSA's <u>Drug and Alcohol Testing MIS Data Collection Form</u>. The completed form, including the complete company name and business tax identification number shall be submitted to the Director of Water and Gas.

1.4.2 Operator Qualification

Contractors are required to provide a current copy of the Company's written Operator Qualification (OQ) Plan prior to award of the Contract. Copies of all employee OQ qualifications shall be provided to the Director of Water and Gas prior to beginning the Work. The OQ written plan and employee records shall be in accordance with Title 49 of the Code of Federal Regulations, Chapter I, Part 192 (49 CFR 192), Subtitle N, "Qualification of Pipeline Personnel."

During the progress of the contract, the Contractor shall furnish the City with records of continuous employee qualification for all employees as requested. Qualification documentation shall be provided for all new employees prior to performing work on the Water and Gas Division's natural gas system.

The City may, at its discretion, accept the provisions of a Contractor's Plan. Contractors shall make available, upon request, written records of their employee's qualifications. At a minimum these records shall include:

- (1) Identification of qualified individual(s)
- (2) Identification of covered task(s) each individual is qualified to perform
- (3) Date that current qualification was received
- (4) Method of evaluation used to obtain qualification
- (5) Name of individual or organization for each covered task
- (6) Training program outlines and materials
- (7) List of non-qualified individuals that will be performing tasks on behalf of the City while under the direction of a qualified individual.

While OQ is a requirement for performing specific tasks on a natural gas system, the Contractor and its personnel shall be required to follow the same OQ procedures and meet the same standards for equitable tasks performed on the City's water system.

1.5 Contractor Qualifications

All Contractors must be qualified by the City's Water and Gas Division. Contractors shall complete the "Statement of Qualification" (SOQ) form provided in Appendix A and submit this form with the Quote.

1.5.1 Pre-requisites for Submitting Quotes

Only Contractors who hold all licenses and certifications required by federal, state and local jurisdictional authorities for performing all aspects of the Work will be permitted to submit Quotes for this Work.

All licenses and certifications must be current and valid at the time of submitting Quotes.

1.6 Insurance

See Insurance in the "Standard Requirements & Instructions for Bidding."

1.7 <u>Interpretation of Specification Intent</u>

The Director of Water & Gas shall have the authority to interpret the intent and meaning of these specifications.

1.8 Work Hours

All Work shall be performed in such a manner that will not conflict with or increase the normal fiveday work week of the City of Danville Water and Gas Division. The normal work hours are thirty minutes after sunrise to thirty minutes before sunset, Monday through Friday. Saturday work shall normally be limited to clean-up operations and no work will be scheduled for Sundays or holidays.

The Contractor will typically be allowed to work as describe above as long as the work does not require the presence of any City personnel other than the inspector that is assigned to the project prior to 8:00 a.m. and no later than 4:30 p.m.

Work continuing after thirty minutes before sunset (night work) will not be allowed.

Weekend work is not included in the normal working hours and the Contractor will not be allowed to perform any work required by the Purchase Order except for cleanup.

The following holidays are observed by the City of Danville and Work by the Contractor on these days, other than cleanup, will not be allowed:

- (1) New Year's Day
- (2) Martin Luther King, Jr. Day
- (3) Easter Monday
- (4) Memorial Day
- (5) Independence Day
- (6) Labor Day
- (7) Thanksgiving Day and day after
- (8) Christmas Eve
- (9) Christmas Day

1.9 <u>Time for Completion</u>

If awarded the Contract, the Contractor shall agree to commence the Work covered by these Specifications within ten (10) calendar days after receipt of the written "Notice to Proceed" from the Owner upon Contractor receipt of all required permits and authorizations and/or as mutually agreed upon by both parties and to fully complete the Work within the number of consecutive calendar days stated in the Purchase Order.

The Contractor shall provide the required working days (Monday through Friday) required to complete the work for each project location. The proposed times shall include the base time required for completion of the project area and any additional time required due to inclement weather. Prior to development of the Purchase Order the Engineer shall calculate the consecutive calendar days that will be allowed for each project area. The calculation shall incorporate weekends and holidays. The calculated consecutive calendar days allowed for each of the project areas shall be combined to determine a single time allowance for completion of the Work.

Time is an essential element of the Purchase Order and it is important that the Work be prosecuted vigorously to completion. It is expressly understood and agreed by and between the Contractor and the Owner that the time allowance for completion of the Work is a reasonable time for the completion of the Work considering holidays and a reasonable allowance for inclement weather.

The Work has been scheduled to occur during the time of year that normally has daytime temperatures that support the application of painting systems. Due to the nature of the Work, extensions of the time allowance for completion of the Work may be made whenever the Engineer agrees that atmospheric conditions exist that according to the product manufacturer and these specifications do not support the application of paint, and when other tasks related to the Work cannot be accomplished. Table 1.11 provides average monthly temperature information for the Danville area.

TABLE 1.11
STATISTICAL TEMPERATURE DATA from 1981 to 2010

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Max. Temp. (° F) | 46.4 | 50.1 | 59.1 | 69.8 | 77.3 | 84.6 | 88.0 | 86.2 | 79.8 | 70.0 | 60.2 | 49.6 |
| Min. Temp. (° F) | 29.0 | 31.8 | 38.2 | 46.8 | 55.4 | 65.0 | 68.6 | 67.9 | 60.1 | 48.9 | 38.3 | 30.5 |
| Mean Temp. (° F) | 37.7 | 40.9 | 48.7 | 58.3 | 66.4 | 74.8 | 78.3 | 77.0 | 69.9 | 59.5 | 49.2 | 40.1 |
| Avg. Total Precip. (in) | 3.42 | 3.01 | 4.11 | 3.46 | 3.88 | 3.85 | 4.59 | 3.97 | 3.96 | 3.53 | 3.36 | 3.27 |
| Avg. Total Snowfall (in) | 2.2 | 1.3 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 |

The City may grant to the Contractor an extension of the time allowance for completion of the Work for additional Work resulting from any modification(s) to the scope of the project, for delays caused by the City or for other reasons beyond the control of the Contractor which in the City's judgment would justify such extension. A request for a time extension shall be made within seven (7) calendar days following any event causing a delay. When scheduled Work cannot be performed for any reason, Contractor shall notify the Engineer.

If the Contractor is requested by the City of Danville to paint or otherwise coat facilities that are not described in the original Purchase Order, then the Contractor shall submit a written request for an extension of time to complete the Work. The Engineer will review the request for additional time and make a determination at that time or defer to a later date within the allowance for completion of the Work as to the allowance for additional time.

1.10 Engineer and Project Manager

Rummel, Klepper and Kahl, LLP is the designated Engineer.

Brian Hahn with the firm of Rummel, Klepper and Kahl, LLP, (804-782-1903) is the designated Project Manager.

The term Engineer, as used herein, indicates the individual or firm named above and/or his duly authorized representative(s).

1.11 Inspection

The Engineer shall have access to the Work at all times. The Contractor shall provide proper facilities for such access and for inspection. The Engineer shall be present for all evaluation and testing or approval of the Work that is required by the Specifications, the Engineer's instructions, laws, ordinances, or any public authority.

The Engineer, in order to be present, shall be given sufficient notice prior to any required testing or approval. The Contractor shall have no claim against the City for time or monies when sufficient notice, as described above, is not given to the Engineer.

The Engineer may require re-examination of any of the Work. If required, the Contractor shall provide all labor, material and equipment necessary to access the Work. If the Work is determined to be in accordance with the Specifications, the City will pay the costs of the re-examination. If the Work is not in accordance with the Specifications, the Contractor shall pay such costs.

Inspector(s) will be stationed at the Work site to report to the Engineer as to the progress of the Work, the manner in which it is being performed, and also to report whenever it appears that the materials furnished or the Work performed by the Contractor fails to meet the requirements of the Specifications.

If a dispute arises between the Inspector and the Contractor as to the materials furnished or to the manner of performing the Work, the Inspector shall have the authority to reject the questionable materials or suspend the Work until the issue can be referred to, and a decision can be made by, the Engineer. Inspectors are not allowed to revoke, alter, enlarge, relax or release any requirements of these Specifications or to issue instructions contrary to the Documents. Inspectors shall in no case act as foremen or perform duties for the Contractor or interfere with the management of the Work by the Contractor.

The Engineer will make a final inspection of the Work included in the Purchase Order as soon as possible after notification from the Contractor that the Work is substantially complete and ready for inspection. If any of the Work is not acceptable at the time of the inspection, the Engineer will advise the Contractor, in writing, as to the particular item(s) to be completed or corrected before the Work can be given final approval and final payment for the Work is approved.

1.11.1 Final Inspection

The Engineer will make a final inspection of all Work required by the Purchase Order as soon as possible after notification from the Contractor that the Work is substantially complete and ready for inspection. If any of the Work is not acceptable at the time of the inspection, the Engineer will advise the Contractor, in writing, as to the particular item(s) to be completed or corrected before the Work can be given final approval and final payment for the Work is approved.

1.12 Scheduling of Work

The Contractor shall typically have control of the scheduling of the proposed Work, however, the City reserves the right to require portions of the work to be completed prior to or following other portions of the Work.

1.13 **Specification Contradictions**

Where contradictions in the Specifications and/or paint system manufacturer's recommendation procedures and practices occur, the more restrictive provision shall apply unless otherwise

authorized by the Engineer. The Contractor shall immediately notify the Engineer of any such contradiction and shall abide by the Engineer's decision.

1.14 Superintendence

The Contractor shall keep on the Work at all times during its progress a competent resident Superintendent, having a minimum of three (3) years experience in the type of Work required under this Purchase Order in addition to having all required licenses and certifications. The Superintendent shall represent all Work performed by all of the Contractor's crews and shall not function as the foreman for any individual crew. The Superintendent shall not be replaced without written notice to the Engineer except under extraordinary circumstances, as determined by the Engineer. The Superintendent will be the Contractor's representative at the site and shall have authority to act on behalf of the Contractor. All communications to or from the Superintendent shall be binding as if given to or received from the Contractor.

1.15 Contractor Crew Requirements

The Contractor shall provide a sufficient number of crews to efficiently complete the Work required by the Purchase Order within the time allowance for completion of the Work. For the purpose of this Contract, the term crew shall be defined as a collective group of Contractor personnel consisting of a foreman and other necessary personnel knowledgeable and able to perform a specific task or tasks. The Contractor shall provide the Engineer with five (5) working days notice prior to introducing new crews to the Project. The City reserves the right to limit the number of crews or request additional crews to complete the Work associated with this Project.

1.16 Certifications

The Contractor and appropriate Contractor staff shall have all valid and current licenses and certifications as are required by all jurisdictional federal, state and local agencies for performing all aspects of the Work.

1.17 Permits and Approvals

The Contractor is responsible for obtaining all permits, authorizations and approvals from VDOT and other jurisdictional entities as required in order to pursue the Work.

1.18 Measurement and Payment

Each completed painted or coated pipeline segment shall be measurement for payment on a basis of lump sum. The pipeline section is:

- 1. Pipeline on U.S. Highway 58 (South Boston Road) crossing Fall Creek
- 2. Pipeline on London Bridge Drive crossing Pumpkin Creek

The term "lump sum" is intended to mean that all materials, equipment and labor necessary to complete the Work as described in the Documents shall be considered and included in the unit prices included in the Quote.

1.18.1 Implied Work

All incidental work required through the Specifications, or as otherwise directed by the Engineer, for which no payment is specifically provided, and any and all work or materials not specified herein which may fairly be implied as included in the Documents and necessary to complete the Work, and which the Engineer shall judge to be so included, shall be executed and/or furnished by the Contractor without additional compensation.

1.19 Payment to Contractor

The City will make a single payment to the Contractor based on a duly certified invoice approved by the Engineer for Work completed and materials stored during the preceding Work period.

Payment for cost of stored materials is not available through this Contract.

The Contractor shall submit the progress payment invoice to the Engineer for approval following completion of all work required by this Contract. The City shall make payment to the Contractor by the last day of the month following the properly submitted and accepted invoice as described above.

The progress payment shall be considered acceptance of the Work.

1.20 Suspension of Work

The Work may be suspended by the Engineer when deemed in the best interest of the City.

2 SECTION 2 – ENVIRONMENTAL and SAFETY STIPULATIONS

The Contractor shall exercise every reasonable precaution throughout the duration of the Work to safely perform all tasks necessary to prosecute the Work and to prevent pollution of water and air, and avoid creating excessive noise according to the following stipulations and other applicable sections of these Specifications.

2.1 References

The publications listed below form a part of this section to the extent referenced. All referenced standards shall be of the latest edition.

THE SOCIETY FOR PROTECTIVE COATINGS (SSPC)

| SSPC-PA Guide 3 | Paint Application Guide No | 5.3 – A Guide to Safety in Paint |
|-----------------|----------------------------|----------------------------------|
| | | |

Application

SSPC-Guide 5 Guide to Maintenance Painting Programs

SSPC-Guide 6 Guide to Containing Debris Generated During Paint

Removal

SSPC-Guide 7 Guide for the Disposal of Lead-Contaminated Surface

Preparation Debris

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH)

ACGIH-IVP Industrial Ventilation Manual of Recommended Practices

AMERICAN NATIONAL STANDARDS INSTITUTE

ANSI/ASC Z9.4 Exhaust Systems – Abrasive Blasting Operations –

Ventilation and Safe Practices

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910-Subpart Z Toxic and Hazardous Substances

29 CFR 1910.134 Respiratory Protections

29 CFR 1910.1000 Air Contaminants

29 CFR 1910.1025 Occupational Safety and Health Standards (Lead)

29 CFR 1926.59 Hazardous Communications

29 CFR 1926.62 Interim Final Rule on Lead Exposure in Construction

40 CFR, Part 50, Appendix G National Ambient Air Quality Standards for Lead

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

OSHA 3142 Lead in Construction

METHOD 7082 Lead

VIRGINIA DEPARTMENT OF CONSERVATION & RECREATION DIVISION OF SOIL AND WATER CONSERVATION (DCR)

DCR-VESCH Virginia Erosion and Sediment Control Handbook

VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT)

VDOT R&B Road and Bridge Specifications

VDOT TC Manual on Virginia Traffic Control Devices

VDOT WAP Work Area Protection Manual

2.2 Submittals

The following shall be submitted in accordance with this Section in sufficient detail to show full compliance with these specifications and all applicable federal, state and local safety and environmental requirements:

2.2.1 Safety Plan

Prior to beginning the Work, a Safety Plan shall be submitted to the Engineer. The City of Danville's Investigations-Training-Safety Officer shall review the plan and monitor compliance during the project.

2.2.2 Environmental Plan

As part of or separate from the Work plan, the Contractor shall submit a detailed plan for protecting the environment and for complying with all federal, state and local environmental requirements and restrictions during the prosecution of the Work.

2.2.3 Permits, Authorizations and Approvals

Copies of all required permits, authorizations and approvals shall be submitted to the Engineer prior to beginning the Work.

2.3 Safety

The contractor shall exercise all precautions necessary to ensure the safety of personnel, the public and property. All applicable safety requirements as contained in SSPC-PA Guide 3, SSPC-Guide 6, SSPC-Guide 7, ACGIH-IVP, ANSI/ASC Z9.4, 29 CFR 1910-Subpart Z, 29 CFR 1910.134, 29 CFR 1910.1000, 29 CFR 1910.1025, 29 CFR 1926.59, 29 CFR 1926.62, 40 CFR Part 50 Appendix G, OSHA 3142, OSHA METHOD 7082, VDOT R&B, VDOT TC, VDOT WAP, and other applicable federal, state and local codes and standards shall be followed in addition to those dictated by safe and prudent industry practices.

2.4 Water Pollution

Pollutants such as chemicals, fuels, lubricants, bitumen, paint, cleaning abrasives, cleaning water, and the byproducts of cleaning, preparing and painting of pipe shall not be discharged or otherwise introduced into or near rivers, streams, wetlands, impoundments or into channels leading to them.

If the Contractor dumps, discharges, or spills any chemicals, fuels, lubricants, bitumen, paint, cleaning abrasives, or the byproducts of preparing and cleaning of the pipe, or other contaminating material that reaches or has the potential to reach a waterway, the Contractor shall immediately notify all appropriate jurisdictional federal, state and local agencies and take immediate actions to contain, remove, and properly dispose of the dumped, discharged, or spilled contaminant.

2.5 Air Pollution

The Contractor shall comply with the provisions of the State Air Pollution Control Law and Rules of the State Air Pollution Control Board, including notifications required therein.

2.6 Noise

The Contractor shall ensure that excessive noise is not created during the Work. This includes ensuring that no equipment is altered in such a way as to produce noise levels greater than those produced by the equipment in its original condition.

3 SECTION 3 - MATERIALS

The Contractor shall supply and pay for all labor and materials necessary for the completion of the Work specified herein and on the Work Orders, except as otherwise expressly provided for in the Documents. Unless otherwise specified, all materials shall be new.

3.1 References

The most current additions of the publications listed below form a part of this section to the extent referenced:

THE SOCIETY FOR PROTECTIVE COATINGS (SSPC)

| SSPC PM V-1 | (4 th Addition) Good Painting Practices - SSPC Painting Manual Volume 1 |
|---------------|---|
| SSPC PM V-2 | (2011) Systems and Specifications – SSPC Painting Manual Volume 2 |
| SSPC-AB 1 | Mineral and Slag Abrasives |
| SSPC-Guide 6 | Guide for Containing Debris Generated During Paint Removal |
| SSPC-Guide 7 | Guide for the Disposal of Lead-Contaminated Surface Preparation Debris |
| SSPC-Paint 5 | Zinc Dust, Zinc Oxide, and Phenolic Varnish Paint |
| SSPC-Paint 22 | Epoxy Polyamide Paints |

3.2 Submittals

Prior to beginning the Work, the following shall be submitted to the Engineer in accordance with this Section in sufficient detail to show full compliance with these specifications and all applicable federal, state and local safety and environmental requirements.

3.2.1 Material Safety Data Sheets (MSDS)

MSDS shall be provided by the Contractor for all materials to be used in prosecuting the Work.

3.2.2 Product Data Sheets (PDS)

PDS shall be provided by the Contractor for all products to be used in cleaning and preparing the pipe for painting, and for all components of the painting system to be utilized in the Work.

3.2.3 Color Chart or Sample(s)

The Contractor shall submit to the Engineer for approval a color chart or sample indicating the finished surface color of the proposed paint system prior to purchasing the paint.

3.3 Painting System

The following painting system is specified for the Work.

3.3.1 <u>Three Part Epoxy- or Modified Epoxy-Polyamide Exterior Steel Coating System with a</u> Prime Coat Containing Zinc Oxide

The Corrosion resistant prime coat of the proposed paint system shall meet the requirements of SSPC-Paint 5 (MIL-P-24648). The intermediate and top paint coats shall meet the requirements of SSPC-Paint 22 (MIL-P-24441). The paint system shall conform to all environmental and safety requirements and restrictions. All components of the paint system shall be from the same manufacturer and specifically designed to be applied as a paint system suitable for the coating of natural gas pipelines and appurtenances attached to bridge structures.

The paint system shall be designed to withstand an environment consisting of exposure to ultraviolet radiation, runoff of roadway snow/ice removal/maintenance salts and chemicals, temperature fluctuations between -20oF and +120oF, and provide excellent resistance to mildew and atmospheric corrosion. The paint system shall have sufficient final flexibility to maintain bond and continuity during the normal expansion and contraction of the metal surface through the specified temperature cycles. The final cured paint system shall be capable of withstanding the normal impact and abrasion that can be anticipated under the bridge-attached service conditions.

The design service-life of the paint system shall be:

- 1) For 100% coverage (removal of all existing paint and areas of rust to bare metal at the designated location): a minimum of 20 years with a minimum warranty-life of 10 years or the longest service-and warranty-lives obtainable for available systems meeting the requirements of these specifications.
- 2) For 20% coverage (localized removal of existing paint where failure or corrosion is found): a minimum of 20 years with a minimum warranty-life of 2 years or the longest service-and warranty-lives obtainable for available systems meeting the requirements of these specifications.

No lead or compound of lead shall be present in any part of the new paint system.

3.3.2 Resistance to Ultraviolet Light Deterioration

An aliphatic urethane finish paint coat may be used in place of a third epoxy coat to provide greater resistance to deterioration of the painting system caused by ultraviolet light. This substitution shall be made according to discussions with the Engineer on the exposure of the pipe to ultraviolet light and in accordance with the paint system manufacturer's recommendations.

3.3.3 Pigment

The pigment for each paint system part (primer, intermediate and top) shall be distinctly different. The color of the final paint system coat shall match the pigment of the existing paint as much as possible. Acceptability of the new paint system pigments are subject to approval by the Engineer.

3.4 Wrap Coating System

The following painting system is specified for the Work.

The Contractor shall utilize a primer and adhesive tape wrap system.

The primer shall be a rubber based primer that provides filler qualities for small pits and pipe irregularities in addition to preparing the metal or existing coating for the wrap application. The primer shall be compatible with the tape wrap utilized for the exposed coating.

The tape wrap shall be an "all weather" PVC plastic tape with high tack adhesives and formulated to resist corrosion. The tape wrap shall provide long term resistance to outdoor weathering and UV exposure. The tape wrap shall have a minimum thickness of twenty (20) mils and shall have a minimum width of four (4) inches. Overlap during the installation process shall conform to the manufacturer recommendations. for Should the Contractor choose to propose based on an alternative coating system, detailed material specifications shall be provided with the Quote. The specifications shall include the type of coating system and the performance specifications.

3.5 Mineral and Slag Abrasives

The Contractor shall provide and utilize abrasive material meeting the requirements of SSPC-AB 1.

The abrasive Type, Grade and Class shall meet the requirements and recommendations of the paint system manufacturer for obtaining the desired pre-coating surface profile in addition to satisfying all environmental and safety requirements.

3.6 Water Used for Cleaning

The Contractor shall obtain and use potable water, free of contaminants that may adversely affect the performance of the paint system for power-washing and wash-blasting of the pipe.

3.7 Solvents Used for Cleaning

The Contractor shall provide and use solvents for cleaning the pipe that meet the recommendations of the paint system manufacturer and all environmental and safety restrictions.

3.8 Tools Used for Mechanical and Hand Cleaning and Preparing Pipe for Painting

All tools provided and used by the Contractor for mechanical and hand cleaning and preparing the pipe for painting shall be in good conditions and capable of rendering the pipe and/or paint surface in a condition which meets the recommendations of the paint system manufacturer.

3.9 Containment and Removal Material and Equipment

All material and equipment provided and utilized by the Contractor for the containment, removal, storing, transporting, and disposing of pipe cleaning and preparing byproducts shall meet all environmental requirements for lead-containing materials per VDOT Type B Structural Classification in addition to complying to all applicable requirements of the EPA, U.S. Department of Transportation, State Water Control Board, Virginia Department of Air Pollution Control, Virginia Department of Waste Management, Virginia Department of Labor and Industry, the U.S. Coast Guard and the requirements of all other applicable federal, state and local jurisdictional agencies.

3.9.1 Containment During Painting

Materials and equipment used to contain vapor, spray and dust during application of the prime, mid and surface coats must meet all of the requirements of the jurisdictional entities included in Specification 3.9.

4 SECTION 4 - CONSTRUCTION REQUIREMENTS

4.1 References

The most current additions of the publications listed below form a part of this section to the extent referenced:

THE SOCIETY FOR PROTECTIVE COATINGS (SSPC)

| THE GOOLETT TORT ROTEOTIVE GOATHVOO (GOT O) | | | |
|---|---|--|--|
| SSPC-QP-1 | Standard Procedure for Evaluating the Qualifications of Painting Contractors (Field Applications to Complex Industrial Structures) | | |
| SSPC QP-2 | Standard Procedure for Evaluating the Qualifications of Painting Contractors to Remove Hazardous Paint | | |
| SSPC-PM V-1 | (4 th Addition) Good Painting Practices - SSPC Painting Manual Volume 1 | | |
| SSPC-SP COM | Surface Preparation and Abrasive Commentary | | |
| SSPC-PA 1 | Shop, Field, and Maintenance Painting of Steel | | |
| SSPC-PA 2 | Measurement of Dry Coating Thickness with Magnetic Gages | | |
| SSPC-AB 1 | Mineral and Slag Abrasives | | |
| SSPC-TR 2/NACE 6G198 | Wet Abrasive Blast Cleaning | | |
| SSPC-SP 1 | Solvent Cleaning | | |
| SSPC-SP 2 | Hand Tool Cleaning | | |
| SSPC-SP 3 | Power Tool Cleaning | | |
| SSPC-SP 6/NACE No. 3 | Commercial Blast Cleaning | | |
| SSPC-SP 7/NACE N0. 4 | Brush-Off Blast Cleaning | | |
| SSPC-SP 10/NACE No. 2 | Near-White Blast Cleaning | | |
| SSPC-SP 11 | Power Tool Cleaning to Bare Metal | | |
| SSPC-SP 12/NACE N0. 5 | Surface Preparation and Cleaning of Steel and Other Hard Materials by High- and Ultrahigh-Pressure Water Jetting Prior to Recoating | | |
| SSPC-Guide 5 | Guide to Maintenance Painting Programs | | |
| SSPC-Guide 6 | Guide for Containing Debris Generated During Paint Removal | | |
| SSPC-Guide 7 | Guide for the Disposal of Lead-Contaminated Surface | | |

Preparation Debris

SSPC-Paint 20 Zinc-Rich Primers (Type I, "Inorganic", and Type II,

"Organic")

SSPC-Paint 22 Epoxy Polyamide Paint (Primer, Intermediate, and Topcoat)

SSPC-Paint 25 Zinc Oxide, Alkyd, Linseed Oil Primer for Use Over Hand

Cleaned Steel

SSPC-Paint 25 BCS Zinc Oxide, Alkyd, Linseed Oil Primer for Use Over last

Cleaned Steel

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH)

ACGIH-IVP Industrial Ventilation Manual of Recommended Practices

AMERICAN NATIONAL STANDARDS INSTITUTE

ANSI/ASC Z9.4 Exhaust Systems – Abrasive Blasting Operations –

Ventilation and Safe Practices

ASTM INTERNATIONAL (ASTM)

ASTM D 4417 (2003) Field Measurement of Surface Profile of Blast

Cleaned Steel

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910-Subpart Z Toxic and Hazardous Substances

29 CFR 1910.134 Respiratory Protections

29 CFR 1910.1000 Air Contaminants

29 CFR 1910.1025 Occupational Safety and Health Standards (Lead)

29 CFR 1926.59 Hazardous Communications

29 CFR 1926.62 Interim Final Rule on Lead Exposure in Construction

40 CFR, Part 50, Appendix G National Ambient Air Quality Standards for Lead

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

OSHA 3142 Lead in Construction

METHOD 7082 Lead

VIRGINIA DEPARTMENT OF CONSERVATION & RECREATION DIVISION OF SOIL AND WATER CONSERVATION (DCR)

VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT)

VDOT R&B (2002) Road and Bridge Specifications

VDOT TC Manual on Virginia Traffic Control Devices

VDOT WAP Work Area Protection Manual

4.2 **Pre-Construction Submittals**

The Contractor shall be required to submit the following to the Engineer for review and approval in accordance with the Specifications provided herein.

All submittals shall be identified as required by the Engineer, and shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and any and all other data which may be required by the Engineer to show that the materials, equipment and labor that the Contractor proposes to provide and use are in accordance with the requirements of these Specifications.

4.2.1 Certifications

All required certifications must be submitted to the Engineer promptly upon award of the Contract. Failure to submit the required certifications promptly upon assignment of the Purchase Order shall result in voiding the Purchase Order and the re-negotiating of the Purchase Order per the provisions of the City of Danville's "Standard Requirements & Instructions for Bidding." All required certifications shall be current and valid and remain so during the duration of the Work. If the Contractor's certifications expire during the course of the Work, the Contractor will not be permitted to perform any of the Work until certification is obtained. No Purchase Order extensions will be allowed due to inactive certification and liquidated damages will apply. The Engineer must be notified of any changes in Contractor certification status.

4.2.1.1 QP-1

The Contractor shall be certified to perform coating operations on all Type B steel structures and shall furnish proof of certification to the Engineer prior to beginning the Work. The certification must meet the requirements of SSPC QP-1.

4.2.1.2 QP-2

The Contractor shall be certified to perform coating removal operations on all Type B steel structures and shall furnish proof of certification to the City prior to beginning the Work. The certification must meet the requirements of SSPC QP-2.

4.2.1.3 **DPOR**

In addition to the Contractor having a valid certification meeting the requirements of QP-2, the Contractor shall provide evidence that the requirements of the Virginia Department of Professional and Occupational Regulations (DPOR) are met.

4.2.1.4 Professional Engineer

For any containment system with a total weight bearing capacity of 1000 pounds or more, the Contractor must provide a certification as to the design acceptability for the structural load of the containment system on the bridge structure. A Professional Engineer, registered in the Commonwealth of Virginia must provide the certification.

4.2.2 Painting Procedure

The Contractor shall provide a complete procedure for evaluating the compatibility of the proposed paint system with the existing paint, cleaning, preparing, and painting the pipe. The procedure shall reference and comply with the paint system manufacturer's recommendations and all permit, safety, and environmental requirements.

4.2.3 Wrap Coating Procedure

The Contractor shall provide a complete procedure for evaluating the compatibility of the proposed tape wrap system with the existing mastic coating, cleaning, preparing, and wrapping the pipe. The procedure shall reference and comply with the tape wrap system manufacturer's recommendations and all permit, safety, and environmental requirements.

4.2.4 Permits and Authorizations

The Contractor shall promptly obtain and submit to the Engineer copies of all federal, state and local permits and authorizations required to perform the Work.

4.2.5 Notifications

Copies of all required federal, state and local notifications shall be provided by the Contractor.

4.2.6 Work Plan

The Contractor must submit to the Engineer a written plan describing all phases of the Work. The work plan must address scheduling, sequencing, traffic control as applicable, cleaning and surface preparation, containment, storage of materials and byproducts, disposal of byproducts, coating application, recoating and cure time projections, site clean-up, and quality control measures that will be taken to ensure that the Work meets the requirements of these specifications, the coating manufacturer's recommendations, and all jurisdictional requirements relating to safety, the environment, and permits. The Work shall not begin until the Engineer approves the work plan.

4.2.7 Superintendence

The Contractor shall provide a list of the superintendents assigned to the Work along with a listing of their certifications, qualifications, experience on similar Work and all relevant contact telephone numbers and addresses.

4.2.8 Personnel and Qualifications

The Contractor shall provide a list of the personnel to be utilized on the Work, the qualifications of the personnel to do the work, and the experience of the personnel with similar Work.

4.2.9 Traffic Maintenance Plan

The Engineer and/or VDOT may require that the Contractor submit a Traffic Maintenance Plan prior to beginning a particular portion of the Work. If the Contractor is asked to submit such a plan, work must not commence on the portion of the project covered by the plan until the Engineer and/or VDOT approves the Traffic Maintenance Plan.

4.2.10 Quality Assurance and Quality Control (QA/QC)

The Contractor shall submit separately, or as part of the Work plan, a copy of the QA/QC procedures that will be implemented during the Work.

4.2.11 Equipment List

The Contractor shall, as required by the Engineer, furnish a complete list of equipment that will be employed on the job from the commencement of the Work and until the Engineer accepts the job.

4.3 Submittals during Construction

The Contractor may be required to submit Daily Inspection Reports to the Engineer during the duration of the Work.

4.4 Submittals Following Construction

The Contractor shall submit the original(s) Inspection Logbook to the Engineer following completion of the Work and prior to final payment.

4.5 Mobilization

The Contractor shall furnish all equipment, materials and labor necessary for the performance of construction preparatory operations, including but not limited to: the movement of personnel, material and equipment to and from the project site; the establishment of the Contractor's offices and storage and equipment areas; the establishment of all markings, signs, traffic detours and controls; and all other facilities necessary to perform the Work as specified herein.

4.6 Equipment, Tools, Labor and Materials

4.6.1 Equipment, Tools, Labor and Materials to Be Furnished By Contractor

The Contractor shall supply and pay for all labor and materials necessary for the completion of the Work specified herein. Unless otherwise specified, all materials shall be new. The Contractor shall provide and pay for all equipment, tools, materials, and labor necessary for the proper completion of the Work specified herein; and any and all applicable safety and environmental compliance tools, equipment and materials which may be required.

Workmanship, tools, equipment and materials shall be of good quality meeting established industry standards. The Contractor shall, as required by the Engineer, furnish satisfactory evidence as to the kind and quality of materials.

Only equipment that will not damage the surfacing along any improved roadways shall be used. When crossing improved roadways with equipment that will damage it, wood boards, flat pads or other approved methods shall be used to prevent damage to the roadway. The Contractor shall repair any and all resulting damage at no cost to the City.

4.6.2 Excess Materials

It shall be the Contractor's responsibility to independently review the project and determine the quantities of materials that are necessary to complete the project in accordance with the Specifications. The Contractor shall not hold the City liable for remaining stored materials including restocking fees charged by the vendors following the completion of the project.

4.7 Inspection by the Engineer

Prior to beginning the Work, the Contractor shall inspect all materials to be utilized in the performance of the Work in accordance with all provisions specified herein as well as all applicable manufacturers' standards and specifications. The Contractor shall remove from the Work all materials which do not meet the provisions specified herein, as well as any and all manufacturer's standards and specifications, and replace such with acceptable materials.

The Contractor shall produce evidence, as required by the Engineer, that any and all items of the Work have been performed in accordance with the project Plans and Specifications. The Engineer will conduct field inspections and witness field tests as specified herein.

4.8 Right-of-Way and Easements

The Contractor shall confine operations to the immediate vicinity of the project location(s) and in no case shall the Contractor encroach beyond the limits of the City's property or rights-of-way. The Contractor shall further use due care in placing construction tools, equipment, materials and supplies so as to cause the least possible damage to property and the least interference with traffic. The placing of such tools, equipment, materials, and supplies shall be subject to the approval of the Engineer. Any damage resulting from the placement of equipment and materials or construction operations occurring outside of City's property, rights-of-way or designated work areas shall be the sole responsibility of the Contractor. The Contractor shall make satisfactory settlement for any damage directly with any property owners involved.

The Contractor shall conduct the Work in such a manner to cause the least inconvenience to the citizens of the area, thereby maintaining good public relations. The Contractor shall not unnecessarily interfere with the use of any public or private improvements, including landscaping; nor shall He unnecessarily damage such improvements. The Contractor shall repair any damage to such improvements to pre-construction condition, or as otherwise directed by the Engineer.

4.9 Maintenance of Traffic

The Contractor shall be required to submit a request for road/lane closures a minimum of two weeks prior to requiring the lane closures. With the request, the Contractor shall provide a schedule to include start and ending dates for any required closure.

The Contractor shall submit a Traffic Maintenance Plan for each section of the Work prior to beginning the Work. The proposed Traffic Maintenance Plan shall be submitted to the Engineer, who will submit the Plan to the City Engineer for review for completeness and compliance with the requirements of the current editions of the "Manual on Virginia Traffic Control Devices", "Virginia Work Area Protection Manual", and the "Virginia Department of Transportation Road and Bridge Specifications". The Contractor must not commence Work on the portion of the project covered by the plan until the City Engineer and/or VDOT approves the Traffic Maintenance Plan.

The amount of roadway closure shall be generally limited to the immediate Work area and shall be in accordance with the above manuals and specifications. The Contractor will be required to notify the Water and Gas Dispatcher prior to closing lanes or entire roadways and upon reopening the road.

All materials, equipment and labor used for traffic control measures shall meet the requirements of the Virginia Department of Transportation. Traffic control measures shall be made available to the Engineer for inspection prior to commencement of the Work.

The Contractor shall provide revisions to initial maintenance of traffic plans for review and dissemination prior to implementing any altered maintenance of traffic plan. The Contractor shall provide any maintenance of traffic plan scheduling adjustments as soon as a need to deviate from the original plan is recognized.

4.10 Maintenance of Ingress and Egress

The Contractor shall strive to maintain, at all times during the execution of the Work, continuous ingress and egress to all affected parcels and traveled ways. When ingress and egress to affected parcels must be blocked, due to the direct execution of the Work, twenty-four (24) hours advance notice must be given to the affected property owner by the Contractor. In no case shall the blocking of ingress and egress be allowed for more than twenty-four (24) hours consecutively.

4.11 Test Section(s) of Pipe

Prior to cleaning, preparing the surface and coating of any continuous section of the pipe, the Contractor shall ensure to the satisfaction of the Engineer that the methods and steps prescribed will obtain the results intended in these specifications. In order to do this the Contractor shall be required to clean, prepare and coat a section of pipe approximately six (6) feet in length on at least one (1) bridge-attached pipeline as determined in discussions with the Engineer. Compatibility tests using a solvent recommended by the coating manufacturer shall be performed on the existing paint or coating of each bridge-attached pipeline prior to beginning the coating process on that pipeline. If the solvent compatibility test yields different results on a particular bridge-attached pipeline than on the initially tested pipeline containing the coating test section, the Contractor shall notify the Engineer and take whatever steps are necessary to determine the cause of the incompatibility and recommend to the Engineer an action that will produce the specified coating results.

The test section of pipe shall be clearly marked and the environmental conditions, under which the coating was performed, recorded. The test section shall be completed a minimum of 48 hours prior to beginning Work on the entire bridge-attached pipeline which includes the test section. The Engineer shall inspect the test section prior to releasing the Contractor to begin the cleaning, surface preparation and coating operations on the entire pipeline.

4.12 Inspection and Evaluation of Existing Pipe and Coating

The Contractor should be aware that there is a high probability that the type and condition of the paint on the bridge-attached pipelines to be painted varies. Prior to beginning the cleaning and surface preparation operations, the Contractor shall visually evaluate the condition of the pipeline to be painted. The Contractor shall note the locations of all areas where the bond of existing paint or coating has deteriorated and/or where rust or bare metal are visible. These areas shall receive near-white blast cleaning in the normal sequence of the Work.

Following the initial visual inspection and surface cleaning, the entire pipeline to be painted shall be brush-blasted to remove all loosely bonded paint/primer and surface film to prepare the existing paint for recoating. Any additional metal or rust exposed during the brush-blasting shall also be scheduled for near-white blasting in the normal sequence of the Work.

Pipe exhibiting good quality paint and bond shall be recoated according to the manufacturer's recommendations and within the normal sequence of the Work.

4.13 Cleaning and Surface Preparation

The following specifications are based on industry practices and guidelines for similar Work. The Contractor may propose alternate procedures for cleaning and surface preparation which are approved or recommended by the coating manufacturer and meet with the Engineer's approval. The ultimate goal is to ensure that the surface of the remaining paint, bare steel pipe and appurtenances are cleaned and prepared in such a manner as to ensure the optimum bond of the new paint system to the underlying surface for the duration specified. All surfaces to be painted shall be free of oil, dirt, dust, unsuitable existing paint/primer, or any other contaminants that adversely affect the adherence of the new paint system.

The Contractor shall note that the surface preparation for each of the locations is as follows:

Work Item 1: 20% coverage. It is anticipated that approximately 20% of the piping and appurtenances at this location will require blasting or hand tool preparation to bare metal. It is anticipated that 100% of the piping at this location will require cleaning by use of water and solvents. The entire piping system and appurtenances (100%) shall be over-coated with a compatible primer and the specified tape wrap system applied.

Work Item 2: 100% coverage. It is anticipated that approximately 100% of the piping and appurtenances at this location will require blasting or hand tool preparation to bare metal. It is anticipated that 100% of the piping at this location will require cleaning by use of water and solvents. These areas shall be spot primed with one coat of corrosion inhibitive primer, and then the entire piping system and appurtenances (100%) shall be over-coated with universal primer and the specified epoxy paint system applied.

The Contractor shall comply with all applicable federal and state codes and laws related to safety, health and the environment including, but not limited to: SSPC-Guides 5,6 & 7; ACGIH-IVP;

ANSI/ASC Z9,4; 29 CFR 1910-Subpart Z, 1910.134, 1910.1000; 1910.1025, 1926.59, 1926.62; 40 CFR Part 50, Appendix G; NIOSH Method 7082; and OSHA 3142.

The cleaning, blasting, hand tool preparation and painting and coating requirements for each of the project locations are based on a visual assessment by the Engineer and monetary considerations from the City for additional cleaning, blasting and painting and coating requirements for these project locations shall not be considered.

4.13.1 Cleaning

All Surfaces to be painted or tape coated shall first be power-washed and/or solvent cleaned per the coating system manufacturer's recommendations. Power-washing shall utilize low-pressure water jetting procedures with water at a pressure of 800 psi to 1,500 psi with a nozzle not more than 12 inches from the surface and as otherwise required by SSPC-SP 12/NACE No. 5 or the paint and coating system manufacturer. Solvent cleaning shall be performed in such a way and with such additives as necessary to remove all oil, dust, dirt, grease, chalking, salt and other contaminants in accordance with SSPC-SP 1.

The water and/or solvent shall be assumed to contain lead-bearing particulates and shall be contained, transported and disposed of per the requirements of SSPC-Guide 7 and all applicable federal and state codes, laws and permit requirements. Also see Specification 4.13.2.2 for Specification for Wet Abrasive Blast Cleaning and specification 4.13.2.4 for Surface Cleaning/Preparation Using a Solvent.

4.13.2 Surface Preparation

The blast cleaning byproducts shall be assumed to contain lead and handled in accordance with the requirements of SSPC-Guide 7 and all applicable federal and state codes, laws and permit requirements.

The surface profile of the blast cleaned bare steel surface shall between 1 and 3 mils in a dense uniform pattern of depressions and ridges as determined by the Keane-Tator surface profile comparator or Testex tape or equivalent method prior to application of the prime coat or as recommended by the paint system manufacturer. The Contractor shall verify to the satisfaction of the Engineer that the blast cleaned surface meets this specification and/or the manufacturer's recommendations. The Contractor shall measure the surface profile according to the requirements of ASTM D4417, Method A, B, or C.

The surface profile of blast cleaned existing coating (paint/primer) to be recoated shall be as recommended by the manufacturer of the paint system and verified by an appropriate method to the satisfaction of the Engineer.

4.13.2.1 Blast Cleaning

Steel shall be prepared by near-white blast cleaning to a condition equivalent to the requirements of SSPC-SP10/NACE No.2 and the paint or tape coating system manufacturer's recommendations.

Existing paint to be recoated shall be brush-off blast cleaned to a condition equivalent to the requirements of SSPC-SP7/NACE No.4, and the paint or tape coating system manufacturer's recommendations.

4.13.2.2 Wet-Abrasive Blast Cleaning

Wet-abrasive blast cleaning may be used in place of cleaning per specification 4.13.1 and blast cleaning per specification 4.13.2.1 as long as it is proven to the Engineer that the method is acceptable to the coating manufacturer and will not reduce the quality and/or durability of the proposed paint or tape coating system. Wet-abrasive blast cleaning shall conform to the requirements of SSPC-TR 2/NACE 6G198 and the paint or tape coating system manufacturer's recommendations.

4.13.2.3 Surface Preparation by Power Tools and/or Hand Tools

Where surface preparation by use of a blast cleaning system is not practical, the Contractor may prepare the surface for application of the paint or tape coating system by utilizing conventional power and/or hand tools. Surface preparation by power tools shall be done in accordance to SSPC-SP 3 or SSPC-SP 11 as appropriate. Surface preparation by hand tools shall be done in accordance with SSPC-SP 2. All surface preparation shall conform to the paint system manufacturer's recommendations.

4.13.2.4 Surface Cleaning/Preparation Using a Solvent

Preparation of the surface utilizing a solvent shall be done in accordance with the paint system manufacturer's recommendations if solvent cleaning is recommended by the manufacturer to achieve the performance specified for the paint. Solvent cleaning shall be performed in such a way and with such additives as necessary to remove all oil, dust, dirt, grease, chalking, salt and other contaminants in accordance with SSPC-SP 1 in addition to conforming to the paint system manufacturer's recommendations.

4.13.3 <u>Cleaning and Surface Preparation Byproduct Containment, Collection, Storage,</u> Removal, Transportation, and Disposal

The Contractor shall include the proposed method for containing, collecting, storing, removing, transporting and disposing of the lead-contaminated byproducts of the cleaning and surface preparation processes in the required Environmental Plan. The proposed methods must comply with all applicable EPA, U.S. Department of Transportation, State Water Control Board, Virginia Department of Air Pollution Control, Virginia Department of Waste Management, Virginia Department of Labor and Industry, the U.S. Coast Guard, the requirements included under specification 4.13, and the requirements of all other applicable federal, state and local jurisdictional agencies. The contractor shall use the most effective methods for managing the byproducts of cleaning and surface preparation.

4.14 Application of Prime, Intermediate and Finish Paint Coats (Paint System)

Apply coatings in accordance with SSPC-PM V-1; SSPC-PA 1; SSPC Guide 5; SSPC-Paint 20, 22, 25, and 25 BCS; and as specified herein and/or by the paint system manufacturer. Apply coatings to surfaces that meet all stated surface preparation requirements. Contractor shall not coat entire bridge-attached pipeline until after the Engineer approves the test required by specification 4.11.

Each coat shall be applied in a consistent wet film so as not to produce runs or sags. After application of each coating, the coating shall be visually inspected for defects or contamination that would affect the ultimate quality, bond and durability of the paint system. Any defect in a coat of primer or paint that is found shall be repaired per the paint system manufacturer's recommendations.

Contractor shall follow the coating procedure that is part of Contractor's approved Work plan and maintain all recommended mixing, pot life, and drying/curing time requirements prior to application of the successive coats.

Contractor shall apply coatings so as to ensure that coatings are not applied to the bridge structure or areas other than the pipeline. Any coating applied to other areas than the pipeline shall be removed according to the paint manufacturer's recommendations exercising care not to damage the existing bridge structure coatings in the process.

4.14.1 Required Coating Dry Film Thicknesses (DFT)

The DFTs specified in Table 4.14.1 below may be altered according to the paint system manufacturer's recommendations to achieve the optimum quality of the final coating system. Changes in the specified DFTs require approval by the Engineer.

Table 4.14.1
Dry Film Thicknesses

| Coat | Thickness Range (Mils DFT) | Minimum Thickness (Mils DFT*) | Maximum Thickness (Mils DFT*) |
|--------------|-------------------------------|-------------------------------------|-------------------------------------|
| Primer | 2 – 5 | 2 | 5 |
| Intermediate | 3 – 5 | 3 | 5 |
| Тор | 2-3 | 2 | 3 |
| Total System | 9 – 12 | 9 | 12 |

^{*} The individual components of the paint system shall be adjusted to provide for the minimum and maximum total paint system requirements.

4.14.2 Weather Considerations

All coatings shall be applied in strict conformance to SSPC-PM V-1; SSPC-PA 1; SSPC-Guide 5; SSPC-Paint 20, 22, 25, and 25 BCS; and the paint system manufacturer's recommendations; whichever is the more stringent.

The City is cognizant of the effect of weather on achieving a quality coating and will make reasonable allowances for weather-related delays to the coating schedule. All unscheduled delays shall be communicated by the Contractor to, and approved by, the Engineer.

The Contractor's Work plan shall include the weather condition parameters recommended by the paint system manufacturer for achieving a quality coating application.

4.15 Field Inspection - Quality Assurance and Quality Control (QA/QC)

The Contractor is required to provide assurance and control of the quality of the Work through procedures recommended in SSPC-PM V-1; SSPC-SP COM; SSPC-PA 1 and 2; SSPC-AB 1; SSPC-TR 2/NACE 6G198; SSPC-SP 1, 2 and 3; SSPC-SP 6/NACE No. 3; SSPC-SP 7/NACE No. 4; SSPC-SP 10/NACE No. 2; SSPC-SP 12/NACE No. 5; SSPC-Guides 5, 6, and 7; SSPC-Paint 20, 22, 25, and 25 BCS; ASTM D 4417; as specified below; and according to the paint system manufacturer's recommendations. The Contractor shall provide qualified, certified and experienced staff to perform the field inspection of the Work.

4.15.1 Inspection Requirements

Field inspections shall be accomplished in accordance with ASTM D 3276 and as required herein. Perform all appropriate tests and inspections, except that viscosity and weight per gallon measurements are not required. Provide all tools and instruments required to perform the testing, as well as any tools that the inspector considers necessary to perform the required inspections and tests. Document each inspection and test, including required hold points and other required inspections and tests, as well as those inspections and tests deemed prudent from on-site evaluation as follows:

- (1) Location or area;
- (2) Date and time;
- (3) Purpose;
- (4) Method:
- (5) Criteria for evaluating;
- (6) Results;
- (7) Determination of compliance;
- (8) List of required rework; and
- (9) Observations.

Collect and record Environmental Conditions as described in ASTM D 3276 on a 24 hour basis, as follows:

- (1) Location or area;
- (2) Date and time;
- (3) During surface preparation, every two (2) hours or when changes occur;
- (4) During coating application and the first four days of initial cure, every hour or when changes occur:
- (5) Overnight hours may be excluded if conditions are measured and recorded through 1800 hours (6:00pm) and then prior to dawn the next day;
- (6) Note the highest and lowest surface temperature recorded each day and the location that the reading was taken; and
- (7) Use a contact thermometer to obtain surface temperature readings.

4.15.2 <u>Inspection Equipment</u>

All equipment shall be in good condition, operational within design parameters, and calibrated as required by the specified standard for use of each device.

Document all equipment used in inspections and testing, including manufacturer, model number, serial number, last calibration date and future calibration date, and the results of onsite calibration performed.

4.15.3 Daily Inspection Reports

The Contractor's inspector shall use ASTM D 3276 Appendix XI Inspection Checklist to monitor daily activities and to prepare daily inspection reports. Use of forms containing entry blocks for all required data is encouraged. The data may be in any format, but must be legible and presented so that it can be easily interpreted. Note all non-compliance issues, and all issues that were reported for rework. Submit report within 24 hours of the date recorded on the report.

4.15.4 Inspection Logbook

A continuous record of all daily activity related to the Work shall be maintained in an Inspection Logbook on a daily basis. The logbook shall be hard or spiral bound with consecutive numbered pages, and shall be used to record all information provided in the daily inspection reports, as well as other pertinent observations and information. The Coating Inspector's logbook sold by NACE is satisfactory. Submit the original Inspection Logbook to the Engineer upon completion of the Work prior to final payment.

4.16 Erosion & Sediment Control

The Contractor shall be required to provide means of preventing erosion and sediment displacement resulting from performance of the Work. The Contractor shall be required by the Engineer to install measures to control erosion and sediment transport if any erosion or sediment displacement is evident on or near the Work site(s) is determined by the Engineer to be directly resulting from the Work. All erosion and sediment transport control measures shall conform to the requirements of the DCR-VESCH, latest edition.

4.17 Materials Handling

The Contractor shall load, unload, haul, receive, sign for, store, and otherwise be responsible for all materials. All materials shall be handled and placed in a manner that prevents damage and does not interfere with public and private travel and safety.

4.18 Cleanup

The Contractor is required to maintain a clean and orderly Work site at all times. Cleanup shall occur regularly during the course of the Work and the Contractor shall leave a clean, clutter free, jobsite at the end of each day. Final cleanup shall result in jobsite conditions equivalent to or better than prior to the Work being done.

4.18.1 Cleanup during Work

The Contractor shall keep the Work area and right-of-way reasonably clear of construction debris and orderly during the progress of the Work. The Contractor will keep all paved surfaces clear of the cleaning and surfacing byproducts. When a mechanical sweeper is used, the sweeper attachment shall be covered to minimize dust.

4.18.2 Final Cleanup

Final cleanup shall consist of all Work necessary to restore the Work area to pre-construction condition. This operation shall include, but not be limited to, the removal of excess or unused materials; paint overspray, drops, spatters, etc.; equipment; containers; containment structures; and other materials and debris.

This cleanup shall continuously follow completion of the Work as close as possible, to the Engineer's satisfaction. Untimely cleanup shall result in the suspension of the Work, as deemed necessary by the Engineer.

CITY OF DANVILLE, VIRGINIA

GAS FACILITIES CONSTRUCTION

"Request for Qualifications"

Mail, fax, or hand-deliver this form to:

City of Danville Purchasing Department – Room 304 427 Patton Street Danville, VA 24541 (434) 799-6528 (434) 799-5102 (Fax)

If the space provided in this form to answer any question is not large enough or you have re-printed documentation, you may add additional sheets.

| COMP. NAME: | | | |
|----------------|-----|-------------------|---|
| ADDRI | ESS | : | |
| l. | | Company I | History |
| | 1. | Type Firm: | ∫ Corporation ∫ Partnership ∫ Single Owner |
| | 2. | Officers: | |
| | | | |
| | 2 | # af forth stines | - Constant of the Constant of |
| | | | e Employees: |
| | 4. | va Contra | ctor's Class A License #: |
| | 5. | | siness Volume: \$test fiscal year) |
| | 6. | | years has your organization been in business as a general contractor under nt name? |
| | 7. | | ever failed to complete any work awarded to you? If so, when, where, and |
| | | | |

| | 8. | Has any officer or partner of your organization ever failed to complete a municipal contract handled in his own name? If so, where, and why? | | | |
|----------|-------------------|--|--|--|--|
| | 9. | Have liens or lawsuits of any kind been filed against any of your contracts? Give full details. | | | |
| | 10. | If a corporation, state: | | | |
| | | a. Date when organized: | | | |
| | | b. Under the laws of what state organized: | | | |
| | 11. | Has any officer or partner of your organization ever been convicted of any violation of any municipal or state codes pertinent to the business of your organization? If yes, explain when, where, disposition or charges, and penalty against you. | | | |
| II. | Coi | mpany Experience Similar to Proposed Project | | | |
| | ast f | Append a list of the construction projects your organization has satisfactorily completed ive (5) years which are comparable to that proposed by the City (\$3 mil +). The following shall be provided for each project: | | | |
| | Ow | me of Project ner's Name, Address, Telephone Number, and Fax Number se of Construction | | | |
| | Cor Nur Nar | ntact Person Who is Able to Attest for BIDDER'S Experience, with Address, Telephone mber, and Fax Number me of BIDDER'S Superintendent ope of BIDDER'S Responsibility | | | |
| with CF | FR 4 | Does your company maintain an anti-alcohol/anti-drug testing program in compliance 9, Part 199? | | | |
| (Writtei | n pla | an and documentation shall be provided upon request by City of Danville) | | | |
| CFR Pa | art 1 | Does your company maintain an Operator Qualification program in compliance with 49 92 Subpart N? | | | |
| (Writte | n pla | an and documentation shall be provided upon request by City of Danville) | | | |
| | | | | | |
| | | | | | |

| Trade Referen | ces | | |
|---|---|------------------------|--|
| Name of Supp | <u>lier</u> <u>Address</u> | Contact Person | <u>Phone</u> |
| | | | |
| Banking Refer | ences | | |
| NAME OF BANK | <u>ADDRESS</u> | <u>PHONE</u> | CONTACT PERSON |
| | | | |
| give name and address o same) within the last five (| | d amount of contract a | heretofore bonded you and amount of bond for the |
| | | \$ | |
| | | \$ | |
| 4. Please provide | latest available annual f | | r firm or parent corporation |
| V. Equipment | | | |
| | on attachment) all vehicl jects (indicate owned, lea | | aterials you currently use o |
| /. Current Workload | | | |
| List all contracts whi which you have signed con owners). | ch you are now performir ntracts but not started wo | | |
| CUSTOMER NAME | <u>ADDRESS</u> | <u>PHONE</u> | CONTACT PERSON |
| · | | | |
| | | | |
| | | | |

After receipt of Qualifications, the City of Danville may make such investigation as it deems necessary to determine the ability of the Contractor to perform the work and the Contractor shall furnish to the City any additional information and data for this purpose the City may request. The City reserves the right to disqualify a Contractor if the evidence submitted by, or investigation of, such Contractor fails to satisfy the City that such Contractor is properly qualified and responsible to carry our the obligations of the contract.

| SIGNED: | - |
|---|---------------|
| SIGNATURE: (Printed) | |
| TITLE: | |
| DATE: | |
| TELEPHONE: | |
| FAX #: | - |
| Subscribed and sworn to before me this day of (Nota | ary Public, |
| County,) My Commission expires | <u>_</u> . |
| Registration as a contractor under Chapter 175E, Section 4539 (117), Code of Virgin | ia as amended |
| by Chapter 404, Act of Assembly, 1944, Certificate No. , 20 . | |